Section 02511 S

WATER LINES

The following supplements modify Section 02511 – Water Lines Standard Specification. Where a portion of the Specification is modified or deleted by this Supplementary Specification, the unaltered portions of the Specification shall remain in effect.

- 1.02 MEASUREMENT AND PAYEMENT: Add the following Paragraph 1.02 A.8 and renumber to 1.02 A.1 through 1.02 A.9:
 - c. Payment for pipe support structure, including pipe guards will be paid on a lump sum basis for each aerial crossing as bid. Payment includes related work performed in accordance with related Sections.
 - 8. No separate payment is to be made for pavement removal and replacement for augering, tunneling, or other trenchless methods of installation.
- 1.04 SUBMITTALS: Add the following Paragraph 1.04 G:
 - G. For pipe with bell-and-spigot ends with rubber gaskets, submit complete joint details with dimensions and tolerances and performance history indicating the proposed joint has performed satisfactorily under similar conditions.
- 2.01 PIPE MATERIALS: Add the following Paragraph 2.01 E:
 - E. Pipe Manufacturer: Performance history shall be minimum 5 years of successful field installations with proposed pipe diameter and proposed type of pipe joint. In absence of 5-year performance history for proposed pipe diameter, the following items shall be required for review by Project Manager prior to approval:
 - a. Quality Assurance Program. Submit certified quality assurance program addressing all aspects of pipe manufacturing process, including coating and lining applications. Certified program shall be ISO 9001; 2000 or other equivalent industry standard nationally recognized program.
 - b. Hydrostatic Joint Test. Perform hydrostatic test of proposed joint at proposed pipe diameter in presence of Project Manager. Test duration shall be minimum 8 hours at 150 psi with no leakage, with pipe cylinder deflected at joint to 3% of nominal diameter, with maximum allowable joint engagement deflection.
 - c. Provide minimum four (4) weeks notice to Project Manager for hydrostatic joint test. Submit test procedures to Project Manager for approval.

Project Manager's decision as to acceptability of joint is final.

- 2.03 RESTRAINED JOINTS: Delete first sentence of paragraph D and replace with the following:
 - D. As an alternative to pipe with an integral restrained joint system, restrained joint fittings may be provided where required on DIP and PVC pipe meeting the following requirements:

Add the following Paragraph 2.03 E:

- E. Ductile Iron Pipe in auger holes must be provided with integral restrained joints at both the bell and the spigot.
- 3.06 JOINTS AND JOINTING: Add the following Paragraph 3.06 A.7:
 - 7. Use feeler gauge to verify water-tightness of each pipe joint prior to application of joint grout. Perform feeler gauge test from interior of pipe, immediately after installation and after backfilling and compaction. Perform feeler gauge test in accordance with manufacturers recommendations to determine if the joint is within tolerance. Provide results to Project Manager. Notify Project Manager immediately when a joint is found to be out of tolerance or fails feeler gauge test, and submit repair plan for approval by Project Manager.

Add the following Paragraph 3.06 F.14

- 14. Do not apply grout to joints that are out of tolerance until acceptable repairs are made.
- 3.09 POLYETHYLENE WRAP FOR DUCTILE IRON PIPE: Delete paragraph B.

END OF SUPPLEMENT

Date

Approved by:

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